Sequence Listing

SEQ ID NO: 1: SAP amino acid sequence AGKTFPDVPADHWGID SINYLVEKGAVKGND KGMFEPGKELTRAEA ATMMAQILNLPIDKD AKPSFADSQGQWYTP FIAAVEKAGVIKGTG NGFEPNGKIDRVSMA SLLVEAYKLDTKVNG TPATKFKDLETLNWG KEKANILVELGISVG TGDQWEPKKTVTKAE AAQFIAKTDKQFGTE $A\ A\ K\ V\ E\ S\ A\ K\ A\ V\ T\ T\ Q\ K\ V$ EVKFSKAVEKLTKED IKVTNKANNDKVLVK EVTLSEDKRSATVEL YSNLAAKQTYTVDVN KVGKTEVAVGSLEAK $T\ I\ E\ M\ A\ D\ Q\ T\ V\ V\ A\ D\ E\ P\ T$ ALQFTVKDENGTEVV SPEGIEFVTPAAEKI NAKGEITLAKGTSTT VKAVYKKDGKVVAES KEVKVSAEGAAVASI SNWTVAEQNKADFTS KDFKQNNKVYEGDNA YVQVELKDQFNAVTT

GKVEYESLNTEVAVV D K A T G K V T V L S A G K A PVKVTVKDSKGKALV SHTVEIEAFAQKAMKDIKLEKTNVALSTKD $V\ T\ D\ L\ K\ V\ K\ A\ P\ V\ L\ D\ Q\ Y\ G$ KEFTAPVTVKVLDKD G K E L K E Q K L E A K Y V N RELVLNAAGQEAGNY $T\ V\ V\ L\ T\ A\ K\ S\ G\ E\ K\ E\ A\ K\ A$ TLALELKAPGAFSKF $E\ V\ R\ G\ L\ D\ T\ E\ L\ D\ K\ Y\ V\ T\ E$ ENQKNAMTVSVLPVD ANGLVLKGAEAAELK VTTTNKEGKEVDATD AQVTVQNNSVITVGQ GAKAGETYKVTVVLD GKLITTHSFKVVDTA $P\ T\ A\ K\ G\ L\ A\ V\ E\ F\ T\ S\ T\ S\ L$ KEVAPNADLKAALLN ILSVDGVPATTAKAT ASNVEFVSADTNVVA ENGTVGAKGATSIYV $K\ N\ L\ T\ V\ V\ K\ D\ G\ K\ E\ Q\ K\ V\ E$ FDKAVQVAVSIKEAK PATK

SEQ ID NO: 2 SAP nucleotide sequence

AAAACATTCCCAGACGTTCCTGCTGATCACTG GGGAATTGATTCCATTAACTACTTAGTAGAAAAAGGCGCAGTTAAAGGTA ACGACAAAGGAATGTTCGAGCCTGGAAAAGAATTAACTCGTGCAGAAGCA GCTACAATGATGGCTCAAATCTTAAACTTACCAATCGATAAAGATGCTAA ACCATCTTTCGCTGACTCTCAAGGCCAATGGTACACTCCATTCATCGCAG CTGTAGAAAAAGCTGGCGTTATTAAAGGTACAGGAAACGGCTTTGAGCCA AACGGAAAAATCGACCGCGTTTCTATGGCATCTCTTCTTGTAGAAGCTTA CAAATTAGATACTAAAGTAAACGGTACTCCAGCAACTAAATTCAAAGATT TAGAAACATTAAACTGGGGTAAAGAAAAAGCTAACATCTTAGTTGAATTA GGAATCTCTGTTGGTACTGGTGATCAATGGGAGCCTAAGAAAACTGTAAC TAAAGCAGAAGCTGCTCAATTCATTGCTAAGACTGACAAGCAGTTCGGTA CAGAAGCAGCAAAAGTTGAATCTGCAAAAGCTGTTACAACTCAAAAAGTA GAAGTTAAATTCAGCAAAGCTGTTGAAAAATTAACTAAAGAAGATATCAA AGTAACTAACAAAGCTAACAACGATAAAGTACTAGTTAAAGAGGTAACTT TATCAGAAGATAAAAGATCTGCTACAGTTGAATTATATAGTAACTTAGCA GCTAAACAACTTACACTGTAGATGTAAACAAAGTTGGTAAAACAGAAGT AGCTGTAGGTTCTTTAGAAGCAAAAACAATCGAAATGGCTGACCAAACAG TTGTAGCTGATGAGCCAACAGCATTACAATTCACAGTTAAAGATGAAAAC GGTACTGAAGTTGTTTCACCAGAGGGTATTGAATTTGTAACGCCAGCTGC AGAAAAATTAATGCAAAAGGTGAAATCACTTTAGCAAAAGGTACTTCAA CTACTGTAAAAGCTGTTTATAAAAaAGACGGTAAAGTAGCTGAAAGT AAAGAAGTAAAAGTTTCTGCTGAAGGTGCTGCAGTAGCTTCAATCTCTAA CTGGACAGTTGCAGAACAAAATAAAGCTGACTTTACTTCTAAAGATTTCA AACAAAACAATAAAGTTTACGAAGGCGACAACGCTTACGTTCAAGTAGAA TTGAAAGATCAATTTAACGCAGTAACAACTGGAAAAGTTGAATATGAGTC GTTAAACACAGAAGTTGCTGTAGTAGATAAAGCTACTGGTAAAGTAACTG TATTATCTGCAGGAAAAGCACCAGTAAAAGTAACTGTAAAAGATTCAAAA GGTAAAGCACTTGTTTCACACACAGTTGAAATTGAAGCTTTCGCTCAAAA AGCAATGAAAGACATTAAATTAGAAAAAACTAACGTAGCGCTTTCTACAA AAGATGTAACAGATTTAAAAGTAAAAGCTCCAGTACTAGATCAATACGGT AAAGAGTTTACAGCTCCTGTAACAGTGAAAGTACTTGATAAAGATGGTAA AGAATTAAAAGAACAAAAATTAGAAGCTAAATATGTGAACAGAGAATTAG TTCTGAATGCAGCAGGTCAAGAAGCTGGTAATTATACAGTTGTATTAACT GCAAAATCTGGTGAAAAAGAAGCAAAAGCTACATTAGCTCTAGAATTAAA AGCTCCAGGTGCATTCTCTAAATTTGAAGTTCGTGGTTTAGACACAGAAT TAGATAAATATGTTACTGAGGAAAACCAAAAGAATGCAATGACTGTTTCA GTTCTTCCTGTAGATGCAAATGGATTAGTATTAAAAGGTGCAGAAGCAGC TGAACTAAAAGTAACAACAACAAACAAGAAGGTAAAGAAGTAGACGCAA CTGATGCACAAGTTACTGTACAAAATAACAGTGTAATTACTGTTGGTCAA GGTGCAAAAGCTGGTGAGACTTATAAAGTAACAGTTGTACTAGATGGTAA ATTAATCACAACTCATTCATACAAGTTGTTGATACAGCACCAACTGCTA AAGGATTAGCAGTAGAATTTACAAGCACATCTCTTAAAGAAGTAGCTCCA ACCTGCGACTACAGCAAAAGCAACAGCTTCTAATGTAGAATTTGTTTCTG CTGACACAAATGTTGTAGCTGAAAATGGTACAGTTGGTGCAAAAGGTGCA ACATCTATCTATGTGAAAAACCTGACAGTTGTAAAAGATGGAAAAGAGCA AAAAGTAGAATTTGATAAAGCTGTACAAGTTGCAGTTTCTATTAAAGAAG

61 CAAAACCTGCAACAAAACATCACCATCACCATCACTAA

SEO ID NO: 2 SAP nucleotide sequence

AAAACATTCCCAGACGTTCCTGCTGATCACTG GGGAATTGATTCCATTAACTACTTAGTAGAAAAAGGCGCAGTTAAAGGTA ACGACAAAGGAATGTTCGAGCCTGGAAAAGAATTAACTCGTGCAGAAGCA GCTACAATGATGGCTCAAATCTTAAACTTACCAATCGATAAAGATGCTAA ACCATCTTTCGCTGACTCTCAAGGCCAATGGTACACTCCATTCATCGCAG CTGTAGAAAAAGCTGGCGTTATTAAAGGTACAGGAAACGGCTTTGAGCCA AACGGAAAAATCGACCGCGTTTCTATGGCATCTCTTCTTGTAGAAGCTTA CAAATTAGATACTAAAGTAAACGGTACTCCAGCAACTAAATTCAAAGATT TAGAAACATTAAACTGGGGTAAAGAAAAAGCTAACATCTTAGTTGAATTA GGAATCTCTGTTGGTACTGGTGATCAATGGGAGCCTAAGAAAACTGTAAC TAAAGCAGAAGCTGCTCAATTCATTGCTAAGACTGACAAGCAGTTCGGTA CAGAAGCAGCAAAAGTTGAATCTGCAAAAAGCTGTTACAACTCAAAAAGTA GAAGTTAAATTCAGCAAAGCTGTTGAAAAATTAACTAAAGAAGATATCAA AGTAACTAACAAGCTAACAACGATAAAGTACTAGTTAAAGAGGTAACTT TATCAGAAGATAAAAGATCTGCTACAGTTGAATTATATAGTAACTTAGCA GCTAAACAAACTTACACTGTAGATGTAAACAAAGTTGGTAAAACAGAAGT AGCTGTAGGTTCTTTAGAAGCAAAACAATCGAAATGGCTGACCAAACAG TTGTAGCTGATGAGCCAACAGCATTACAATTCACAGTTAAAGATGAAAAC GGTACTGAAGTTGTTTCACCAGAGGGTATTGAATTTGTAACGCCAGCTGC AGAAAAAATTAATGCAAAAGGTGAAATCACTTTAGCAAAAGGTACTTCAA CTACTGTAAAAGCTGTTTATAAAAAAGACGGTAAAGTAGTAGCTGAAAGT AAAGAAGTAAAAGTTTCTGCTGAAGGTGCTGCAGTAGCTTCAATCTCTAA CTGGACAGTTGCAGAACAAAATAAAGCTGACTTTACTTCTAAAGATTTCA AACAAAACAATAAAGTTTACGAAGGCGACAACGCTTACGTTCAAGTAGAA TTGAAAGATCAATTTAACGCAGTAACAACTGGAAAAGTTGAATATGAGTC GTTAAACACAGAAGTTGCTGTAGTAGATAAAGCTACTGGTAAAGTAACTG TATTATCTGCAGGAAAAGCACCAGTAAAAGTAACTGTAAAAGATTCAAAA GGTAAAGCACTTGTTTCACACACAGTTGAAATTGAAGCTTTCGCTCAAAA AGCAATGAAAGACATTAAATTAGAAAAAACTAACGTAGCGCTTTCTACAA AAGATGTAACAGATTTAAAAGTAAAAGCTCCAGTACTAGATCAATACGGT AAAGAGTTTACAGCTCCTGTAACAGTGAAAGTACTTGATAAAGATGGTAA AGAATTAAAAGAACAAAAATTAGAAGCTAAATATGTGAACAGAGAATTAG TTCTGAATGCAGCAGGTCAAGAAGCTGGTAATTATACAGTTGTATTAACT GCAAAATCTGGTGAAAAAGAAGCAAAAGCTACATTAGCTCTAGAATTAAA AGCTCCAGGTGCATTCTCTAAATTTGAAGTTCGTGGTTTAGACACAGAAT TAGATAAATATGTTACTGAGGAAAACCAAAAGAATGCAATGACTGTTTCA GTTCTTCCTGTAGATGCAAATGGATTAGTATTAAAAGGTGCAGAAGCAGC TGAACTAAAAGTAACAACAACAAACAAAGAAGGTAAAGAAGTAGACGCAA CTGATGCACAAGTTACTGTACAAAATAACAGTGTAATTACTGTTGGTCAA GGTGCAAAAGCTGGTGAGACTTATAAAGTAACAGTTGTACTAGATGGTAA ATTAATCACAACTCATTCATTCAAAGTTGTTGATACAGCACCAACTGCTA AAGGATTAGCAGTAGAATTTACAAGCACATCTCTTAAAGAAGTAGCTCCA ACCTGCGACTACAGCAAAAGCAACAGCTTCTAATGTAGAATTTGTTTCTG CTGACACAAATGTTGTAGCTGAAAATGGTACAGTTGGTGCAAAAGGTGCA ACATCTATCTATGTGAAAAACCTGACAGTTGTAAAAGATGGAAAAGAGCA AAAAGTAGAATTTGATAAAGCTGTACAAGTTGCAGTTTCTATTAAAGAAG

CAAAACCTGCAACAAAACATCACCATCACCATCACTAA

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